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Claims

1. An isolated nucleic acid sequence comprising a promoter sequence specifically expressed or active in the xylem forming tissue in a plant, characterized in that said sequence is chosen among:

- SEQ ID NO 1 through 5

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- sequences being functionally homologous to any one of SEQ ID NO 1 through 5
- sequences showing at least 90% homology to any one of SEQ ID NO 1 through 5.
- The nucleic acid sequence according to claim 1, wherein said sequence is expressed or active in specific stages of xylem formation in a plant.
 - 3. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a plant.
 - 4. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a woody plant or a fibrous plant.
 - 5. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a woody plant, said woody plant being a dicotyledon.
 - 6. The nucleic acid sequence according to claim 1 or 2, wherein the promoter sequence is expressed or active in a plant chosen among poplar, aspen, birch, willow, eucalyptus, sweetgum (liquidamber), spruce, larch, hemlock, pine, cotton, hemp, sisal, flax, wheat, maize, potatoes, and oil seed rape.
 - 7. A transgenic plant exhibiting modified wood formation properties in comparison to the wild-type of said plant, **characterized** in that at least one of the sequences according to claim 1 or 2 is functionally inserted into said transgenic plant.
 - 8. A transgenic plant exhibiting modified apoptosis properties in comparison to the wild-type of said plant, **characterized** in that at least one of the sequences according to claim 1 or 2 is functionally inserted into said transgenic plant.

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9. A transgenic plant according to claim 7 or 8, wherein said transgenic plant is a woody plant or a fibrous plant.

- 10.A transgenic plant according to claim 7 or 8, wherein said transgenic plant is chosen among poplar, aspen, birch, willow, eucalyptus, sweetgum (liquidamber), spruce, larch, hemlock, pine, cotton, hemp, sisal, flax, wheat, maize, potatoes, and oil seed rape.
- 11.A method for expressing specific genes in the xylem of a plant, **characterised** in that at least one of the sequences according to claim 1 or 2 is used.
- 12.A method for production of a transgenic plant, **characterised** in that at least one of the promoters according to claim 1 is functionally inserted into the plant.
- 13. Propagating material of a transgenic plant according to any one of claims 7 through 10, said propagating material carrying said at least one sequence in its genome.
- 14. Propagating material according to claim 13, said propagating material chosen among seeds, fruits, cuttings and parts of the plants, such as protoplasts, plant cells, calli or roots.
- 15.A nucleic acid construct comprising a sequence according to claim 1 or 2.
- 16.A nucleic acid construct according to claim 15, wherein the construct comprises a vector chosen among a plasmid, a cosmid, a virus or a bacteriophage.
- 17.A nucleic acid sequence capable of hybridising under stringent conditions to at least one of the sequences according to claim 1 or 2.